IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of: U.S. Patent No. 6,320,932

Serial No.:

09/748,590

Filed:

December 22, 2000

Issued:

November 20, 2001

Inventor:

Mark Dinsmore

Title:

MINIATURE RADIATION SOURCE WITH FLEXIBLE PROBE AND LASER DRIVEN THERMIONIC EMITTER

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CER 1.8(a) in an envelope addressed to Mail Stop REISSUE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: 11/20/03

Gayle Endres

Mail Stop REISSUE

Assistant Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

COMBINED DECLARATION AND POWER OF ATTORNEY IN REISSUE APPLICATION

Sir:

- I, Mark Dinsmore, declare that:
- 1. My residence address is 85 Horse Pond Road, Sudbury, MA.
- 2. I am a citizen of the United States of America.
- 3. I believe I am the original, first and sole inventor of the subject matter that is described and claimed in United States Patent Number 6,320,932B2 (hereinafter "the '932 patent"), granted on November 20, 2001, and for which I solicit a reissue patent.

- 4. I have read and understand the contents of the attached reissue application, including the specification and claims.
- 5. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.
- 6. I believe the '932 patent, which matured from application Serial No. 09/748,590, filed on December 22, 2000, and which is a division of application No. 09/311,792, filed on May 13, 1999, now Pat. No. 6,195,411, to be wholly or partly inoperative or invalid by reason of my claiming less than I had a right to claim in the patent. The error includes not having claimed a flexible probe having an x-ray tube at its distal end, and including: a) a flexible optical fiber adapted for transmitting optical radiation incident on a proximal end to a distal end; b) an optical source for generating optical radiation directed to the proximal end of the optical fiber; and c) an x-ray tube coupled to the distal end of the optical fiber, including a thermionic cathode, responsive to optical radiation transmitted to the distal end of said optical fiber and incident upon a surface of the cathode to generate electrons, and an x-ray target responsive to incident electrons emitted from the thermionic cathode to emit x-rays; and d) means for accelerating electrons emitted from the thermionic cathode toward the x-ray target; wherein the beam of transmitted optical radiation has a power level sufficient to heat at least a portion of the surface to an electron emitting temperature so as to cause thermionic emission of electrons from the surface. It was also error not to have claimed a vascular probe, a brachytherapy treatment apparatus, and an x-ray treatment apparatus having these characteristics.

- 7. All errors being corrected in the reissue application, up to the time of filing this declaration, arose without any deceptive intent.
- 8. I appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Mark G. Lappin, Registration No. 26,618

Toby H. Kusmer, Registration No. 26,418

Elizabeth E. Kim, Registration No. 43,334

David M. Mello, Registration No. 43,799

Jeffrey J. Miller, Registration No. 39,773

Brian Colandreo, Registration No. 42,427

SEND	CORR	ESPONDENC	TF TO:
THE STATE OF THE S	α		712 I V 7.

DIRECT TELEPHONE CALLS TO:

Mark G. Lappin McDermott, Will & Emery 28 State Street Boston, MA 02109 Mark G. Lappin (617-535-4043

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Filed:	December 22, 2000	
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Inventor:	Mark Dinsmore	
Title:		ION SOURCE WITH FLEXIBLE
	PROBE AND LASER I	DRIVEN THERMIONIC EMITTER
	CERTIFICA	TE OF MAILING (37 C.F.R. § 1.8(a))
I hereby certify that in an envelope addre	this correspondence is being deposited wessed to Mail Stop REISSUE, Commission	rith the United States Postal Service as First Class Mail under 37 CFR 1.8(a) ner for Patents, P.O. Box 1450, Alexandría, VA 22313-1450 on the date indicated below
Date: 1/20/03		Gayle Endres Challes 43
Mail Stop RE		
Commissione P.O. Box 145		
	√A 22313-1450	
Alexandria,	VA 22313-1430	
	ASSENT O	F ASSIGNEE TO REISSUE
Sir:		
The undergraph of the entire interessue patent right of the assets the control of the assets of the control of	th a post address Carl Zeis erest in the above-mentioned tapplication. Attached is a ssignee, Carl-Zeiss-Stiftur	ftung, doing business as Carl Zeiss, a legal person of s Strass 22, 73447 Oberkochen, Germany, assignee of ed Letters Patent, hereby assents to the accompanying a "Statement Under 37 CFR 3.73(b)," establishing the ng, doing business as Carl Zeiss, to take action in this empowered to sign this certificate on behalf of the
		Respectfully submitted,
		CARL-ZEISS-STIFTUNG, doing business as CARL ZEISS
Date:	By	<i>/</i> :
	Pr	inted Name:
	Ti	tle:

BST99 1382685-1.056249.0140

Statement Under 37 CFR 3.73(b)

Applicant/Patent Owner: Application No./Patent No.: Entitled:		Mark Dinsmo	ore / Carl Zeiss			
		09/748,590/6,320,932 Filed/Issue Date: 12/22/00/11/20/01 MINIATURE RADIATION SOURCE WITH FLEXIBLE PROBE AND LASER DRIVEN THERMIONIC EMITTER				
Carl	-Zeiss-Sti	ftung, doir	ng business as C	Carl Zeiss, a legal person of Germany		
(Name of Assignee) (Type of Assignee)						
certif of eit		the assignee	of the entire right,	title and interest in the patent application identified above by virtue		
A.	[X]		the Patent and Tra-	ator(s) of the patent application identified above. The assignment was ademark Office at Reel, Frame, or for which a copy		
OR						
В.	[]	A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:				
1.	From:			То:		
	The docu	ment was rec	orded in the Patent	at and Trademark Office at		
	Reel		Frame	, or for which thereof is attached.		
2.	From:			То:		
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3.	From:			To:		
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	[] Cop	oies of assign	ments or other doc	cuments in the chain of title are attached.		
abov				locuments in the chain of title of the patent application identified lge and belief, title is in the assignee identified above.		
assig		lersigned (wl	nose title is supplie	ed below) is empowered to sign this certificate on behalf of the		

BST99 1382694-1.056249.0140

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:				
Name:				 - <u>-</u>
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